

REMARKS

Claims 1-7 are all the claims pending in the application.

I. Claim Rejections Under 35 U.S.C. § 112(1st):

The Examiner rejects claims 4 and 7 under 35 U.S.C. § 112(1st) for failing to comply with the enablement requirement. That is, the Examiner does not believe that the features of the invention defined by claims 4 and 7 are adequately described in the specification.

Claim 4: With respect to claim 4, the Examiner indicates that it is unclear how the stator would function having openings throughout its body. Specifically, the Examiner inquires whether the openings extend through stator windings or an armature, and asserts that the drawing does not clearly show how the openings are provided in the stator itself. Applicants respectfully disagree.

The straightforward language of claim 4 recites that “*lateral openings extend through the stator.*” Clearly, those skilled in the art would recognize that the claimed openings are provided in the stator core (as opposed to the stator windings, if any). This is because if openings were provided through the stator windings, then they would necessarily interfere with (and potentially altogether defeat) the electrical cooperation between the stator and the rotor.

Furthermore, the specification thoroughly discusses the claimed openings. For example, the structure and function of the claimed openings is discussed in the specification at page 3, first full paragraph. And in the figure of the application, the claimed openings are designated with reference character “11.”

Quite clearly, those skilled in the art of generators could make a stator core with an opening (as claimed) in view of the teachings set forth in the present application coupled with information known in the art without undue experimentation. Indeed, a lateral opening in a stator core could be formed by any conventional hole forming technique, such as drilling for example. With respect to hole forming techniques, a patent need not teach and *preferably omits* what is well known in the art.¹

Claim 7: With respect to claim 7, the Examiner asserts that the disclosure seems to indicate that whole device seems to swivel without any control. Applicants again disagree.

The basis for the rejection of claim 7 is simply incorrect. This is because the invention that one skilled in the art must be enabled to make and use is that *defined by the claims* of the application.² In this case, claim 7 merely defines the structural connection between the pod and the mast; namely, claim 7 recites that the pod is mounted to “*swivel*” at the end of mast. The claim does not, however, require any type of swivel control or that the pod freely rotates.

Further, contrary to the Examiner’s allegations, the specification clearly indicates that a system 10 is provided for steering the pod 1.³ That is, the system 10 controls the swivel action of the pod.

¹ MPEP 2164.01.

² MPEP 2164.

³ Spec., p. 3, second full paragraph.

II. Claim Rejections Under 35 U.S.C. § 112(2nd):

The Examiner rejects claims 1-7 under 35 U.S.C. § 112(2nd) for the reasons noted at numbered paragraph 4 of the Office Action.

Claim 1: With respect to claim 1, the Examiner indicates that the pod and the fairing seem to be the same component. This is simply not the case. With reference to the figure, the pod 1 generally (and collectively) refers to all of the constituent elements provided above the mast 12. This is why the lead line extending from reference character “1” is provided with an arrow head. In this regard, the fairing 7 is only one of the constituent elements of the pod 1. The various elements of the pod 1 (and their structural interrelations) are clearly set forth in the bodies of the pending claims. Certainly then, the pod 1 and the fairing 7 are not one in the same element.

Claim 7: With respect to claim 7, the Examiner asserts that the disclosure and the drawing suggest that the openings extend through the pod and not the stator. This is simply not understood. The disclosure and drawing are straightforward. The openings 11 extend through the stator 3.

The Examiner also points out that the stator 3 is inside the fairing 7, and therefore questions how any air would go through the stator 3. The specification is straightforward in this regard. Namely, when the rotor 4 rotates, it circulates hot air on the inside of the fairing 7.⁴ That

⁴ Spec., p. 3, third full paragraph.

is, the lateral openings 11 direct the flow of hot air on the inside of the pod 1 along the fairing 7, which therefore serves as a heat exchanger with the cooler air on the outside of the pod 1.

For these reasons, claims 4 and 7 particularly point out and distinctly claim the subject matter regarded as the invention.

III. Claim Rejections on Prior Art Grounds:

The Examiner rejects claim 1 under 35 U.S.C. § 102(b) as being anticipated by U.S. 1,362,753 to E. A. Sperry ("Sperry"); claim 2 under 35 U.S.C. § 103(a) as being obvious over Sperry in view of U.S. 4,350,898 to Benoit ("Benoit"); claim 3 under 35 U.S.C. § 103(a) as being obvious over Sperry in view of U.S. 6,133,659 to Rao ("Rao"); claims 4 and 7 under 35 U.S.C. § 103(a) as being obvious over Sperry in view of U.S. 4,767,939 to Calley ("Calley"); and claims 5 and 6 under 35 U.S.C. § 103(a) as being obvious over Sperry in view of U.S. 4,366,387 to Carter, Jr. et al. ("Carter").

For the following reasons, these rejections are respectfully traversed.

A. *Claim 1:*

The Examiner relies upon Sperry to teach each and every feature of the invention defined by claim 1.

More specifically, and with reference to Fig. 1 of Sperry, the disclosed device includes a three piece housing, inclusive of a hub 7, a tubular casing 1, and a tail piece 13. Two generators 4, 5 are provided on the inside of the housing, and both generators 4, 5 are coupled to blades 9 via a rotating shaft 6.

However, claim 1 has been amended to include the recitations of claim 4.

The Examiner recognizes that Sperry does not teach or suggest the “*lateral openings*”, and therefore looks to Calley to allegedly teach this feature.

With reference to Fig. 4 of Calley, the disclosed device includes an alternator 15 having a housing 20. The housing 20 is formed of three elements: i.e., a front end bell 41, a stator 36, and a rear end bell 42.⁵ The housing 20 is provided with openings 55. However, in sharp contrast to the claimed invention, the openings are provided in the rear end bell 42, not the stator 36.⁶ Calley’s disclosure is explicit in this regard. Thus, even if those skilled in the art were motivated to combine the references, they would have (at best) provided holes in the tail piece 13 of Sperry’s housing 20.

Dependent claims 2, 3 and 5-7 are patentable for the reasons given above with respect to claim 1.

Further, regarding claims 5 and 6, the Examiner recognizes that Sperry does not disclose the “*gear box*” required by claims 5 and 6, and therefore looks to Carter to teach this feature.

With reference to Fig. 2 of Carter, the disclosed device includes a generator 34 connected to a propeller 14 via a gear box 36 that is provided on the inside of the stream lined housing 32.

The Examiner reasons that those skilled in the art would have been motivated to modify Sperry by attaching a gear box (as taught by Carter) to the generators 4, 5 to provide an efficient

⁵ Calley, col. 3, l. 8-11.

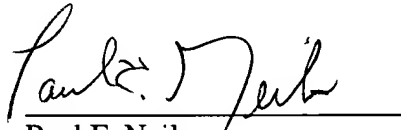
AMENDMENT UNDER 37 C.F.R. § 1.111
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wind generator with an automatic overspeed control. The Examiner's motivation is misplaced since the blade construction (not the gear box 36) provides the automatic overspeed control.²

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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² See Carter, col. 8, l. 59 – col. 9, l. 2.